



AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Currently Amended): A method for processing speech, comprising:

receiving a speech input of a speaker;

generating speech parameters from said speech input;

determining parameters describing an absolute loudness of said speech input, the absolute loudness being a loudness of the speech at a location of a source of the speech, and

evaluating at least one of said speech input and said speech parameters using said parameters describing the absolute loudness.

Claim 2 (Previously Presented): The method according to claim 1, wherein the step of evaluation comprises a step of emotion recognition.

Claim 3 (Previously Presented): The method according to claim 1, wherein the step of evaluation comprises a step of speaker identification.

Claim 4 (Previously Presented): The method according to claim 1, wherein a microphone array comprising a plurality of microphones is used for determining said parameters describing the absolute loudness.

Claim 5 (Previously Presented): The method according to claim 1, wherein at least one of a location and distance of the speaker is determined.

Claim 6 (Previously Presented): The method according to claim 1, wherein the absolute loudness is determined using algorithms for at least one of auditory and binaural processing.

Claim 7 (Previously Presented): The method according to claim 5, wherein said absolute loudness is computed by normalizing a measured loudness, or energy by said distance.

Claim 8 (Previously Presented): The method according to claim 5, wherein said distance is determined using the time delay of the speech input between said plurality of microphones.

Claim 9 (Currently Amended): A speech processing system, which is configured to:
receive a speech input of a speaker,
generate speech parameters from said speech input,
determine parameters describing an absolute loudness of said speech input, the absolute loudness being a loudness of the speech at a location of a source of the speech, and
evaluate at least one of said speech input and said speech parameters using said parameters describing the absolute loudness.

Claims 10-11 (Cancelled).

Claim 12 (Currently Amended): A computer readable medium encoded with a computer program configured to cause a processor-based device to execute a method of:
receiving a speech input of a speaker,

generating speech parameters from said speech input,
determining parameters describing an absolute loudness of said speech input, the absolute loudness being a loudness of a speech at a location of a source of the speech,
evaluating at least one of said speech input and said speech parameters using said parameters describing the absolute loudness.

Claim 13 (Currently Amended): A method for processing speech, comprising:
receiving a speech signal of a speaker;
generating speech parameters from said speech signal;
determining a distance of the speaker based on a time delay of a respective arrival of said speech signal at two or more microphones;
normalizing a measured loudness or energy by said distance;
calculating an absolute loudness being a loudness of a speech that generated the speech signal at a location of a source of the speech; and
evaluating at least one of said speech signal and said speech parameters using the normalized loudness or energy.

Claim 14 (Currently Amended): A system for emotion recognition and/or speaker identification, comprising:
at least two microphones configured to receive a speech signal;
a data processor configured to generate speech parameters from said speech signal, to determine a distance of the speaker based on a time delay of a respective arrival of said speech signal at said microphone, to normalize a measured loudness or energy by said distance, to calculate an absolute loudness being a loudness of a speech that generated the speech signal at a location of a source of the speech, and

further configured to evaluate at least one of said speech signal and said speech parameters using the normalized loudness or energy.

Claim 15 (New): A method for processing speech comprising the steps of:

- receiving a speech signal of a speaker;
- calculating an absolute loudness being a loudness of a speech that is generated by the speaker at a location of a source of the speech;
- determining features from the speech signal, wherein the features are at least partly based on the absolute loudness; and
- determining an emotion and/or an identity of the speaker based on the features.